



SS12 THRU SS120

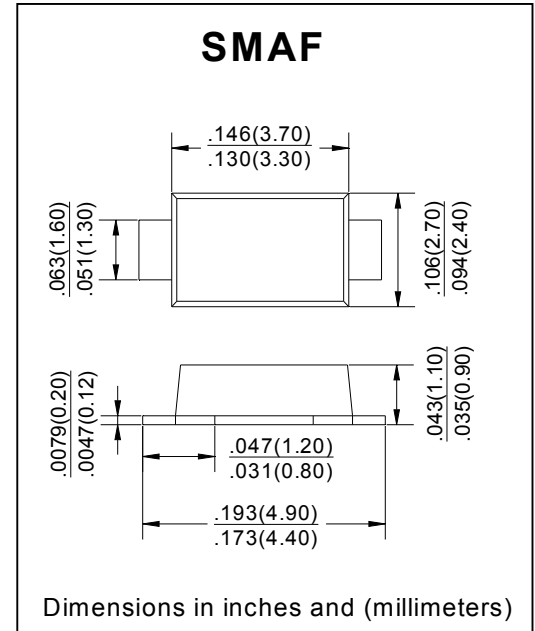
VOLTAGE RANGE
20 to 200 Volts
CURRENT
1.0 Ampere

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:
260 C/10 seconds at terminals

Mechanical Data

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead :Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram



Maximum Ratings and Electrical Characteristics

- Ratings at 25°C ambient temperature unless otherwise specified.
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%.

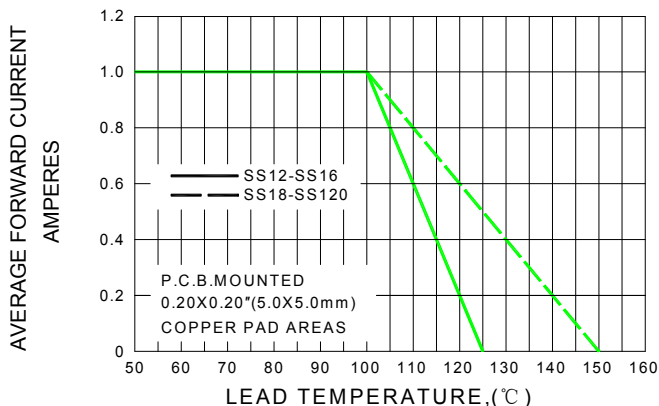
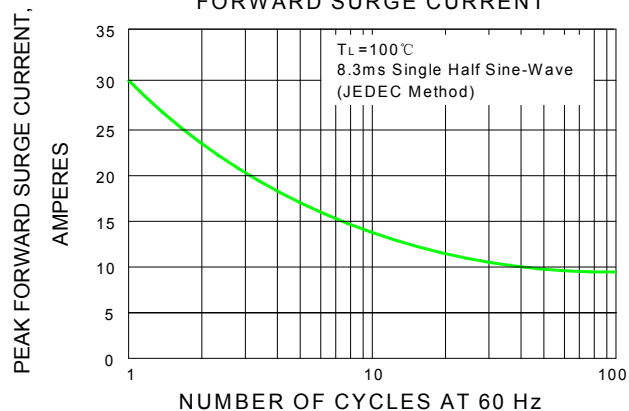
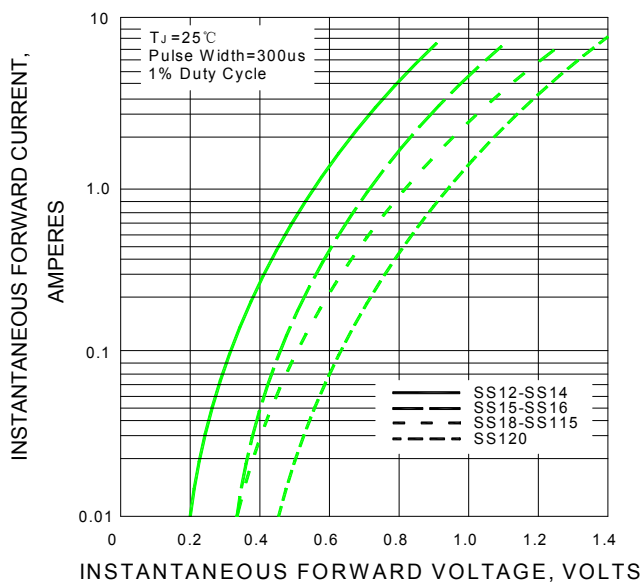
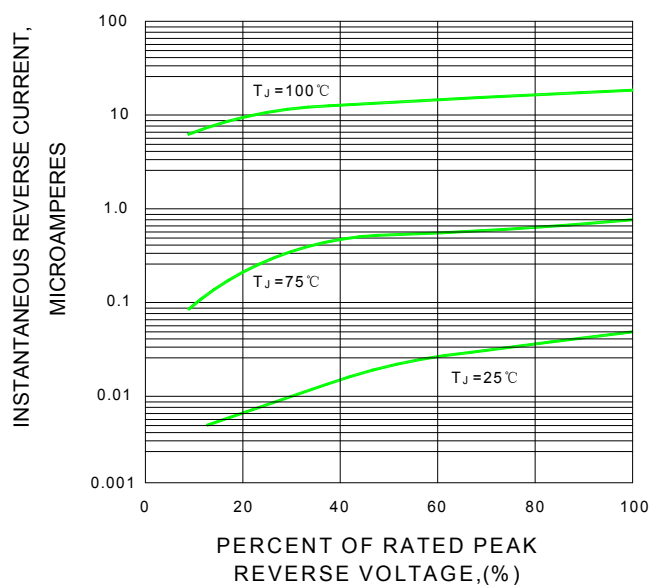
TYPE NUMBER	SYMBOLS	SS 12	SS 14	SS 15	SS 16	SS 18	SS 110	SS 115	SS 120	UNIT	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	V_{RMS}	14	28	35	42	56	70	105	140	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	40	50	60	80	100	150	200	Volts	
Maximum Average Forward Rectified Current at T_L see figure 1 $T_L=105^\circ\text{C}$	$I_{(AV)}$	1.0								Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30								Amps	
Maximum Instantaneous Forward Voltage @ 1.0A(Note1)	V_F	0.55	0.70			0.85		0.95		Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage per element	I_R	$T_A = 25^\circ\text{C}$	0.5					0.2		mA	
		$T_A = 100^\circ\text{C}$	20.0			10.0		2.0			
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	80								$^\circ\text{C/W}$	
	$R_{\theta JL}$	28									
Operating Junction Temperature	T_J	(-55 to +125)				(-55 to +150)				$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	(-55 to +125)									$^\circ\text{C}$

Notes:

1. Pulse test: 300µs pulse width, 1% duty cycle.
2. Unit mounted on P.C.B. with 0.20"×0.20"(5.00mm×5.00mm) copper pads.



Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

F1G.1-FORWARD CURRENT DERATING CURVE**F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT****F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS****F1G.4-TYPICAL REVERSE CHARACTERISTICS****F1G.5-TYPICAL JUNCTION CAPACITANCE**